## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

The listing of claims will replace all prior versions, and listings, of claims in this application.

- 1. (**Original**) The use of a peptide comprising all or an immunogenic part of the amino acid sequence designated SEQ ID NO 6 in the manufacture of a vaccine to stimulate an anti-cancer immune response against COA-I (SEQ ID NO 2), wherein the immunogenic part of the sequence is processed and expressed by antigen presenting cells in association with sympathetic MHC class II molecules.
- 2. (**Currently amended**) Use according to claim 1, wherein the inununogenic immunogenic part of the sequence comprises 8 or more contiguous amino acid residues of SEQ ID NO 6.
- 3. (**Original**) Use according to claim 2, wherein the immunogenic part of the sequence comprises 10 or more contiguous amino acid residues of SEQ ID NO 6.
- 4. (**Currently amended**) Use according to claim 1, wherein the immunogenic part of the sequence <u>further</u> comprises SEQ ID NO 9 at the N-terminus and/or SEQ ID NO 10 at the C- terminus.
- 5. (**Original**) Use according to claim 1, wherein the immunogenic part of the sequence consists of SEQ ID NO 6.
- 6. (**Previously amended**) Use according to claim 1, wherein the immune response is stimulated against Colorectal Cancer cells.

Appl. Serial No. 10/595,388 Restriction Requirement dated March 1, 2010 Response dated June 30, 2010

- 7. (**Previously amended**) Use according to claim 1, wherein the peptide is an oligopeptide.
- 8. (**Original**) Use according to claim 1, wherein the MHC class II molecules are the HLA DR $\beta$ 1\*0402 and/or HLA DR $\beta$ 1\*1301 alleles.
- 9. (**Previously amended**) Use according to claim 1, wherein the vaccine further comprises PBMC's (Peripheral Blood Mononuclear Cells) either expressing the HLA DR $\beta$ 1\*0402 and/or HLA DR $\beta$ 1\*1301 alleles.
- 10. (**Previously amended**) Use according to claim 1, wherein the vaccine further comprises Dendritic cells, pulsed with a peptide comprising all or an immunogenic part of the amino acid sequence designated SEQ ID NO 6 or transfected with polynucleotides encoding said peptide, the Dendritic cells either expressing the HLA DRβ1\*0402 and/or HLA DRβ1\*1301 alleles.
- 11. (Currently amended) A vaccine comprising a peptide, as-defined-in-claim-1 wherein the peptide comprises a portion consisting of all or an immunogenic part of the amino acid sequence set forth in SEQ ID NO 6, where said portion is sufficient to stimulate an anti-cancer immune response against COA-I (SEQ ID NO 2), and wherein the immunogenic part of the sequence is processed and expressed by antigen presenting cells in association with sympathetic MHC class II molecules.
- 12. (**Currently amended**) A vaccine according to claim 11 <u>further</u> comprising a suitable carrier.
- 13. (**Currently amended**) A vaccine according to <u>claim 11</u>, comprising the peptide and PBMC's expressing a sympathetic MHC Class II allele therefor.

Appl. Serial No. 10/595,388 Restriction Requirement dated March 1, 2010 Response dated June 30, 2010

- 14. (**Original**) A vaccine according to claim 13, wherein the MHC Class II allele is the HLA DRβ1\*0402 and/or HLA DRβ1\*1301 allele.
- 15. (**Previously amended**) A method for stimulating immunity in a patient against colorectal cancer, comprising stimulating the production of antibodies against a peptide, as defined in claim 1.
- 16. (**Original**) A method according to claim 15, wherein immunity is stimulated in the patient in conjunction with PBMC's allogeneic or autologous for at least one sympathetic HLA.-II allele capable of presenting all or an immunogenic part of the amino acid sequence designated SEQ ID NO 6 in an immunogenic manner.
- 17. (**Original**) A method according to claim 16, wherein the allele is selected from HLA DR $\beta$ 1\*0402 and/or HLA DR $\beta$ 1\*1301.
- 18. (**Previously amended**) A method according to claim 15, wherein the patient has PBMC'S autologous or allogeneic for at least one sympathetic HLA-II allele capable of presenting the COA-1 epitope in an immunogenic manner, the method comprising administering a vaccine comprising the immunising portion of COA-1, or a precursor therefor, to the patient.
- 19. (**Previously amended**) A method for stimulating immunity to colorectal cancer in a patient, said method comprising:
- i) isolating PBMC's or their progenitors from the patient and transforming said cells with at least one sympathetic HLA-II allele capable of presenting the COA-1 epitope in an immunogenic manner,
  - ii) introducing the transformed PBMC's back into the patient, and
- iii) administering a vaccine comprising the immunising portion of COA-1, or a precursor therefor, as defined in claim 1, to the patient.

Appl. Serial No. 10/595,388 Restriction Requirement dated March 1, 2010 Response dated June 30, 2010

- 20. (**Original**) A method according to claim 19, wherein the immunising portion of COA-1 or a precursor therefor, is administered with the transformed PBMC's.
- 21. (**Previously amended**) Use according to claim 1, wherein the immune response is stimulated against melanoma cells.